

REMARKS/ARGUMENTS

Applicant has carefully reviewed and considered the Office Action mailed on November 20, 2006, and the references cited therewith.

No claims are amended, canceled, or added. Claims 2-5, 8-9, 12-13, and 6-57 are withdrawn from consideration. As a result, claims 1, 6-7, 10-11, and 14-15 are now pending in this application.

Information Disclosure Statement

The information Disclosure Statement filed 06/13/05 failed to comply with 37 CFR 1.98(a)(2), which required a legible copy of each cited foreign patent document; each non-literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed.

The present response includes a copy of the IDS as filed 06/09/05, along with the two references not previously included.

§103 Rejection of the Claims

Claims 1, 6-7, 10-11, and 14-15 were rejected under 35 USC § 103(a) as being unpatentable over Masashi et al (J.P. 2002-076356) in view of Ishihara et al (U.S. Publ. No. 2004/0116617). Applicant respectfully traverses the rejection as follows.

Applicant's independent claim 1, as previously presented, presently recites, "a channel contacting the drain electrode and the source electrode, wherein the channel includes one or more of a metal oxide including zinc-germanium, zinc-lead, cadmium-germanium, cadmium-tin, cadmium-lead".

In the November 20, 2006, Office Action, the Examiner acknowledged that "Masashi et al. do not explicitly disclose that the transition-metals element are germanium, lead, cadmium, tin or lead." Applicant respectfully notes that paragraph 0041 of the Masashi reference only describes ZnO as an "ingredient of each component". Masashi remarks that five group III elements (i.e., B, Al, Ga, In, and

Tl) and four group VII elements (i.e., F, Cl, Br, and I) as possible dopants for n form ZnO, and five group I elements (i.e., Li, Na, K, Rb, and Cs) and five group V elements (i.e., N, P, As, Sb, and Bi) as possible dopants for p form ZnO. The reference concludes the list of possibilities for dopants of n and p form ZnO with “and doped 3 more transition-metals element.”

Applicant respectfully submits that the quoted phrase from Masashi is incomprehensible and, thus, does not describe, teach, or suggest anything that can be appreciated by one of ordinary skill in the relevant art. Even if the quoted phrase were interpreted to mean that three more transition-metals can be used to dope ZnO, stating that three more elements can be used is vague and open-ended after already providing specific examples of nineteen elements that can be used as dopants. Hence, Masashi does not describe, teach, or suggest any of the elements (i.e., Ge, Pb, Cd, and Sn) combined with Zn that are recited in Applicant’s independent claim 1, as previously presented.

From Applicant’s review of the Ishihara reference, the reference does not describe, teach, or suggest “a channel contacting the drain electrode and the source electrode, wherein the channel includes one or more of a metal oxide”, as recited in Applicant’s independent claim 1, as previously provided.

The Ishihara reference appears to describe, “a solid acid catalyst that is excellent from the point of toxicity, environment and others, wherein reaction can be progressed effectively with Bronsted acid or Lewis acid catalyst.” (Abstract). Ishihara appears to go on to describe, “an acid catalyst comprising a metallic salt of tris(perfluoroalkylsulfonyl)methide shown by the formula $[(RfSO_2)_3C]_nM_2$ ”. (Paragraph 0008). As described in the same paragraph, Rf appears to represent a perfluoroalkyl group having one or more carbon atoms. The M_2 component of the formula appears to represent an element selected from alkaline metals, earth metals, and transition metals that, among ten others, include Zn, Ge, Pb, Cd, and Sn.

Firstly, Applicant respectfully submits that the references are non-analogous art, per MPEP 2141.01(a). Applicant respectfully notes that MPEP 2141.01(a) in Section III provides examples of Analogy In The Chemical Arts and in Section V

provides examples of Analogy In The Electrical Arts. Applicant submits that the Ishihara reference describes material relating to the chemical arts and that the present application discloses material relating to the electrical arts. Applicant notes no examples in MPEP 2141.01(a) of analogy crossing over from the chemical arts to the electrical arts. As such, the Ishihara reference does not appear to be “in the field of applicant’s endeavor”, per MPEP 2141.01(a).

Moreover, Applicant respectfully submits that the Ishihara reference describes “an acid catalyst comprising a metallic salt”, or a perfluoroalkyl group having one or more carbon atoms. In contrast, the present application discloses “a channel contacting the drain electrode and the source electrode, wherein the channel includes one or more of a metal oxide”. As such, the Ishihara reference does not appear to be “reasonably pertinent to the particular problem” dealt with in the present application, per MPEP 2141.01(a). Hence, for the reasons just presented, Applicant respectfully submits that the Ishihara reference is not analogous art and should not be used as a basis for a 103 rejection of Applicant’s claims.

Secondly, Applicant respectfully submits that the references do not “suggest the desirability of the claimed invention”, per MPEP 2143.01. As presented above, Applicant respectfully submits that the Ishihara reference is not “in the field of applicant’s endeavor” and that the Ishihara reference does not appear to be “reasonably pertinent to the particular problem” dealt with in the present application. As such, Applicant respectfully submits that the Ishihara reference is not analogous art and that the reference does not “suggest the desirability of the claimed invention” of the present application by providing “some teaching, suggestion, or motivation” for “combining or modifying the teachings of the prior art to produce the claimed invention”, per MPEP 2143.01. Hence, Applicant respectfully submits that the Ishihara reference should not be used to establish obviousness and, thus, should not be used as a basis for a 103 rejection of Applicant’s claims.

Thirdly, Applicant respectfully submits the references do not describe “art recognized suitability for an intended purpose”, per MPEP 2144.07. As presented

above, the Ishihara reference appears to describe, “a solid acid catalyst that is excellent from the point of toxicity, environment and others, wherein reaction can be progressed effectively with Bronsted acid or Lewis acid catalyst.” (Abstract). In contrast, Applicant’s independent claim 1, as previously presented, recites, “a channel contacting the drain electrode and the source electrode, wherein the channel includes one or more of a metal oxide”.

Applicant respectfully submits that any chemical compound described in the Ishihara reference as a “solid acid catalyst” cannot be selected based on its suitability for its intended use when used for “a channel contacting the drain electrode and the source electrode” in a semiconductor device, per MPEP 2144.07. Hence, Applicant respectfully submits that the Ishihara reference should not be used to support an obviousness determination and, thus, should not be used as a basis for a 103 rejection of Applicant’s claims.

As such, Applicant respectfully submits that each and every element and limitation of independent claim 1, as previously presented, is not described, taught, or suggested by the Masashi and Ishihara references, either individually or in combination. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the 103 rejection of independent claim 1, as previously presented, as well as those claims that depend therefrom.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney Gregg. W. Wisdom at (360) 212-8052 to facilitate prosecution of this matter.

At any time during the pendency of this application, please charge any additional fees or credit overpayment to the Deposit Account No. 08-2025.

CERTIFICATE UNDER 37 CFR §1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: **MS AMENDMENT** Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450 on this 20th day of February, 2007.

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Date: 2/20/2007